Appendix A

The office action mailed on 02/03/2006 states:

"Claims 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application No. 2003/0085994 to Fujita et al.

In regards to claims 21-22, Fujita et al. disclose a capsule imaging device having communication means and a battery and an imaging means, the capsule imaging system comprising: an ultra-wideband system for the imaging means (see paragraph 0122)."

Paragraph 0122 states, "If the UWB technology is incorporated into a radio communication device for a capsule-type medical device, a frequency having a long wavelength can be used, which is easily transparent to a human body, for example."

This indicates that Fujita et al. anticipate that the ultra-wideband (UWB) device will be used only as communication means, not as the imaging means of the capsule.

This is further enforced by the fact that the UWB technology they anticipate using will have "a long wavelength ..... which is easily transparent to a human body". In order to have an UWB capsule imaging device, the emitted UWB signals must be reflected back from or be absorbed by the body tissues, not pass through the tissues easily.

It is notable that the Fujita et al. patent application does not claim, mention in passing, or hint at the use of an UWB imaging device, while it does claim many other types of sensory means available.

These are the spots where they specify different types of sensory means:

1. Paragraph (PPg) 0051 mentions, "A CMOS image-pickup element 17", as do PPgs 0052, 0063 and 0098.
2. PPg 0098 points out, "Three kinds of image pickup elements may be used as described below in variation examples." These three are subsequently detailed.
3. PPg 0099 describes one as an "artificial retina", as do PPgs 0100 and 0101, and 0107 lists the different types of "artificial retinas" available on the market.
4. PPg 0108 states, "Second variation uses a threshold value modulation type image sensor (VMIS), which is the next generation image sensor having both merits of the CCD and the CMOS image-pickup element." This is not an UWB imaging

device. Particular VMIS devices are listed in PPg 0114. PPg 0115 talks more of the "artificial retina".

5. PPg 0116 states, "Third variation is a color image sensor for obtaining color signals of RGB in one pixel." This is not an UWB device, but probably a visible light imaging device like that available from FOVEON Corp.

This has so far described the "three kinds of image pickup elements" from point 2.

Now moving on to the UWB device presented in Fujita's patent application.

6. PPg 0122 further states, "power consumption for the radio communication device can be suppressed." Here the "communication device" being referred to is the "typical pulse radio, an ultra wideband (UWB) technology" they describe in the first sentence of PPg 0122. They are saying the UWB device is for communication not imaging purposes.
7. PPg 0125 identifies a "pH sensor", as do PPgs 0126, 0128, 0129, 0168, 0169, 0170, 0173.
8. PPg 0172 identifies a "collecting tool" ..... "such as an ileus tube".
9. PPg 0173 states, "a temperature sensor, a pressure sensor, a light sensor or a blood sensor ..... may be adopted."
10. PPg 0176 identifies "an ultrasonic wave probe" ..... "instead of the sensor".
11. PPg 0182 identifies "a permanent magnet ..... and a body fluid sucking portion". The magnet is also mentioned in PPgs 0185 and 0191.
12. PPg 0192 states "using a blood sensor or observation means".

None of these references anticipates an ultra-wideband imaging means.

Nearly all of these devices referred to in the body of the patent application are included in the claims.

Claim 3, "image pickup device including an objective lens".
Claim 4 and 26, "CMOS image-pickup element or a threshold value modulating type image sensor."
Claim 5 and 27, "so-called artificial retina".
Claim 8 and 29 and 37, "living body information detecting device is at least one of a pH sensor, a temperature sensor, a pressure sensor, a light sensor, and a blood sensor."
Claim 9 and 30, "detecting device is an ultrasonic wave probe."
Claim 17. "having a living body information detecting device for obtaining living body information;".
Claim 25, "image pickup device".
Claim 40. "color image sensor".
Claim 41, "CMOS image sensor."

Then, the UWB device is mention in Claim 44, which states:

"44. The capsule-type medical device according to claim 43, wherein the *communication means* is an ultra wideband (UWB) method."

"Communication means" is emphasized to make the point that Fujita et al. had no thought of claiming the UWB device as the imaging means for their capsule.

SUMMARY

It would have been simple for Fujita et al. to claim an ultra-wideband imaging means for their capsule endoscopy device. All they had to do is add a single claim to their list of claims.

They did not claim this because it did not occur to them to use an UWB circuit as an imaging sensor. They only thought of employing an UWB circuit for communication means. This shows that it is not an obvious leap to use UWB circuits for imaging, especially inside a capsule device. They did not think of this.

It is surprising that they did not claim an UWB imaging means, as they did claim a multitude of other sensor means for their capsule.

Therefore I believe my patent for a capsule endoscopy device including UWB sensor imaging means should be granted, since this is a new invention with the non-obvious use of new technology in a novel application.

The claim that I make, using an UWB sensor as the imaging means, is of the same type of claim that Fujita et al. make employing other types of sensors (such as CMOS, artificial retina, etc.) as their imaging means. If their claims of this sort are granted, then mine too should be granted, by the same line of reasoning. I think my claim is less obvious than their claims, as evidenced by the fact that they did not claim it.

Thank you for your time and consideration.

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EXAMINER	
ART UNIT	PAPER NUMBER

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

COPY

Notice of Non-Compliant Amendment (37 CFR 1.121)

Application No.	Applicant(s)	
10/729725	WEIRICH J	
Examiner	**Art Unit**	
KASZTEJNA, M	3739	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

The amendment document filed on *22 May 2006* is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____.
- ☒ 4. Amendments to the claims:
  - ☒ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: *Claims 1-20, are not mentioned as being canceled in Amendment.*

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officeflyer.pdf .

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted within the time period set forth in the final Office action.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action.

Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

Failure to timely respond to this notice will result in:
Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Legal Instruments Examiner (LIE) — 571-272-4374 Telephone No.